

long-term sustainable use of the island's forestry resources will be guided by the National Forest Policy and the National Forest Management and Conservation Plan, which seek to address the main challenges facing the sub-sector including:

- Protecting the forest resource from a wide range of threats including natural and man-made hazards, soil erosion, and illegal logging
- Restoring tree cover and conserving biodiversity of forest species
- Ensuring long-term economic contribution of forests including agro-forestry and fuelwood
- Enhancing the use of forests for recreation and tourism

2.20.12 Fisheries Development

The long-term development of Jamaica's marine fisheries resources will require the adoption of sustainable fishing practices to counter the threats to stocks of fish and crustaceans posed by over-harvesting, habitat destruction and pollution. A major challenge is the protection of the fishery resources from incursions by fishing vessels from other countries including Colombia and Honduras. The development of inland fisheries will require improved research and development, expanded infrastructure and fingerling production, and addressing the environmental impacts of aquaculture.

2.20.13 Environmental Issues

The long-term development of the sector also must address the many environmental issues associated with agriculture, including:

- Soil erosion from over – cultivation and inadequate soil conservation techniques in hillsides farming
- Use of chemicals fertilizers which pollute groundwater and food supplies
- Deforestation resulting from clearing of hillsides, illegal settlements, conversion to monoculture farming and uncontrolled harvesting of trees.

2.20.14 Agricultural Hazards

Weather related shocks accounted for the most significant losses in agricultural production during the period 2004-2008. Damage and losses to the agriculture sector from a combination of five hurricanes and two tropical storms were estimated at \$15.0 billion. More efforts should therefore be generated in investigating mitigating strategies such as comprehensive risk insurance, early warning systems and strengthening linkages with emergency preparation and response systems at national and community levels. Measures to mitigate the effects of drought should continue to be concentrated on provision of suitable irrigation alternatives.

3. SWOT Analysis

Agriculture is an essential component in the sustainable



development of nations. A standard tool of strategic analysis is SWOT analysis, which seeks to identify the main strengths, weaknesses, opportunities and threats for a given entity, ranging from a nation to a sector to an individual enterprise. For the Agriculture Sector in Jamaica the identification of strengths and weaknesses represents the internal assessment of the sector while the consideration of opportunities and threats represents the analysis of the external environment for the sector.

Strengths
Weaknesses
Opportunities
Threats

The SWOT analysis, along with the Situational Analysis, form the basis for identifying goals, objectives and strategies that may be employed to apply the strengths and address the weaknesses of the sector, and capitalize on the opportunities and mitigate the threats to the long-term development of the sector.



The SWOT analysis for Jamaica's Agriculture Sector is presented in Table 10 below.

Table 10: SWOT Analysis – Agriculture

Internal Analysis	
 Strengths <ul style="list-style-type: none"> • Strong human resource base: relatively highly qualified workforce at the technical levels • Experienced and technical capacity of Ministry of Agriculture and Fisheries staff, which provides support services to the sector • Access to technical information via internet and intranet by technical staff for dissemination to farmers • Linkages with national and international organizations • Agricultural Policy Framework and Medium Term Plan, Agricultural Development Strategy formulated to guide the development of the sector • Development of local breeds of animals, including cattle breeds developed in Jamaica for local conditions • Development of germplasm material for some plants • Internationally recognized superior taste and quality of some crops (coffee, cocoa, ginger, pimento) which obtain premium prices from niche markets • Local production of most poultry products consumed locally • Experience in export of fresh and processed foods to the major markets of the US, Europe and Japan • Various functioning farming organizations (Jamaica Agriculture Society, commodity boards and farmer associations) • Secondary and tertiary level agricultural teaching institutions • Strong farming traditions in some areas • Farmers organizations supported by Government 	Weaknesses  <ul style="list-style-type: none"> • Government budgetary constraints resulting in inadequate research and development, deteriorating extension services and the inability to properly maintain and upgrade facilities and equipment • Limited application of technology • Use of inefficient/outdated technologies and production systems • Weak linkages between other Sectors/Divisions/Departments • Inability to consistently supply markets due to declining production and productivity • Uncompetitive production of some local foods when compared with some imported foods • Small size of landholdings • Insecure land tenure arrangements and difficulties in obtaining land titles for many farmers • High cost of inputs • High levels of praedial larceny • Poor marketing and distribution systems • Inadequate infrastructure • Farmers' organizations not well funded or supported by farmers • Inadequate funding by Government for projects and programmes • Average age of farmer over 55 years • Young persons show little interest in agriculture • Many farmers are poorly educated • Limited agricultural research • Locally developed breeds of animals

<ul style="list-style-type: none"> • Comparative advantage in some products • Good quality agricultural lands available • Different microclimates to sustain several types of crops • Extensive network of roads • Good ground water resources • Irrigation systems in some areas • Long-standing tradition and history of agricultural sector • Access to technical information via internet and intranet by technical staff for dissemination to farmers 	<p>such as cattle at risk of extinction</p> <ul style="list-style-type: none"> • Loss of some plant germplasm material • Limited credit facilities for farmers and other investors in the sector • No venture capital facilities • Communication between Government and the private interests in the sector weak • Limited opportunity for farmer training and development • Neglect of rural villages and towns • Many large, medium and small tracts of agricultural land lying idle • Poor condition of rural and farm roads • High transportation cost • Few available tractors or other equipment for hireage • Poor ICT connectivity in deep rural areas and little use of cell phones for dissemination of information • Poor farm business/management practices
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SWOT Analysis

External Analysis	
 Opportunities <ul style="list-style-type: none"> • Value-added production and niche markets for an increasing range of food products • Possibilities for the introduction of new farm (including greenhouse cultivation, hydroponics etc.) and post harvest technologies • Modernization of the sector would allow for more internationally competitive local production • New production and marketing opportunities through organic and fair trade products • Potential for satisfying demand from the tourism and manufacturing (agro-processing) sectors for agricultural goods and services • Potential for increased profitability by negotiation of contracts on behalf of farmers to replace informal marketing arrangements • Potential to produce animal feeds from local ingredients • Expansion of fruit tree production for agro-processing and fresh fruit markets • Livestock investment options becoming more competitive because of increased world prices for meat and dairy products • Sugar cane industry can be expanded to include the production of ethanol for biofuels and bagasse for co-generation • New and emerging markets such as China and India for some of our products such as coffee and pimento and other spices and herbs • CSME could provide new markets and investments within CARICOM • Increasing access to world markets under WTO regulations • Possible utilization of Government and private lands for agricultural development • Proximity to the US for exports and for imports of agricultural inputs 	 Threats <ul style="list-style-type: none"> • High level of reliance on imports • High cost of capital • Uncertainty of international funding for projects and other support systems • Globalization – impact of further liberalization on an uncompetitive agricultural sector • Impact of economic downturn on availability of government funding for agricultural sector • Drastic reduction in preferential prices for major export crops of sugar and bananas • Possible outbreak of diseases from external sources • Aggressive international competition • Degradation of environment/landscape • Competing uses for agricultural lands such as for housing development • Contamination of agricultural export shipments with contraband (e.g. illegal drugs such as marijuana) at our major sea ports and airports • Climatic change due to global warming resulting in increasing frequency and severity of flooding and droughts, as well as greater intensity of hurricanes • Rising prices of imported staples used for animal feeds and local consumption due to their global use as biofuels • Rising price of imported oil and its impact on costs of inputs including transport and fertilizers • Challenges in implementation of Common External Tariff (CET) • Farmers lack information on Caribbean government supported programmes

<ul style="list-style-type: none"> • Market led preference system • Increased development of organic agriculture 	<ul style="list-style-type: none"> • Lack of information of liberalization standards • Increase in non-tariff trade barriers (e.g. WTO)
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4. Vision Statement for Agriculture Sector

The long-term process of planning for the Agriculture Sector is guided by a Vision that describes a future for the sector that is desirable for its stakeholders and that can be achieved through their own efforts within a realistic time frame. The Sector Plan contains an overall Vision for the Agriculture Sector, which reflects the contributions of the stakeholders represented on the Agriculture Task Force during the Vision 2030 Jamaica planning process.

4.1 Vision Statement

The Vision Statement for the Agriculture Sector for Vision 2030 Jamaica is:

“The long-term vision is the dynamic transformation of the Jamaican Agricultural Sector. Within the ambit of a supportive and responsive environment of targeted government policies, programmes and institutional support, and commitment to human resource development, the sector will experience a sustained, research oriented, technological, market-driven and private sector led revolution, which revitalizes rural communities, creates strong linkages with other sectors and emphatically repositions the sector in the national economy. With clear focus on production of high value commodities which can command strategic advantage in the global marketplace, agricultural producers will operate highly integrated, competitive and profitable enterprises which significantly enhance wealth creation capabilities and at the same time, make considerable contribution to national food security, employment generation and the enhancement and sustainability of the environment.”

Adapted from Agricultural Development Strategy
Ministry of Agriculture & Fisheries
www.moa.gov.jm

4.1.1 Strategic Vision

The long-term strategic vision for the Agriculture Sector in Jamaica is built on a number of fundamental elements, including the following:

- i) An Agriculture Sector that is competitive in Jamaica and in regional and international markets;
- ii) An Agriculture Sector that is driven by private sector investment within a policy and regulatory framework that fosters competition and transparency;

- iii) An Agriculture Sector that contributes to the long-term socio-economic development of Jamaica;
- iv) An Agriculture Sector that is environmentally sustainable with increased use of renewable energy sources and minimal harmful environmental impacts; and
- v) An Agriculture Sector that is knowledge-driven based on widespread use of appropriate technology and supported by relevant research and development.

This strategic vision is expressed in the strategic framework for the Agriculture Sector for Vision 2030 Jamaica presented below.

4.2 Strategic Planning Framework

4.2.1 Strategic Approach

The strategic planning for Jamaica's agriculture sector is based on the premise that agriculture is a fundamental component of the Jamaican economy, representing an enduring source of employment, income and export earnings. Domestic agricultural producers make an important contribution to the nation's food supply, while agricultural communities play central roles in rural development and natural resource management. However, the Jamaican agricultural sector has underperformed for decades, and has lost ground in global competitiveness. Under Vision 2030 Jamaica, the Agriculture Sector Plan lays out a clear roadmap to address the main factors that have limited the progress of this important sector, and to increase its contribution to economic and social development and environmental sustainability.

The Agriculture Sector Plan starts with measures to increase the competitiveness and productivity of agricultural production, including: increasing the application of capital equipment, small tools and mechanization; developing economies of scale through clustering of activities and facilities; strengthening the use of modern farming systems and best practices; diversifying into higher value-added production; and strengthening the application of technology, innovation, research and development to agricultural production. The Sector Plan includes specific strategies targeted at the development of key agricultural sub-sectors, including traditional and non-traditional crops, fisheries and forestry.

The drive for increased productivity is complemented by measures to enhance the marketing of agricultural products locally and internationally. These include: strengthening the collection, evaluation and dissemination of marketing information; development and upgrading of marketing networks and infrastructure; enhancing market access and promotion; and strengthening the application of

intellectual property rights and nation branding to the marketing of products from Jamaican agricultural and agro-processing industries.

To ensure an adequate supply of human resources with the requisite skills at all levels the Sector Plan will: broaden and strengthen the range of educational and training institutions and programmes for agriculture and related disciplines; encourage the participation of youth in agriculture; and strengthen long-term planning for agricultural labour force. The Sector Plan also seeks systematically to improve the most important aspects of the supporting environment for agriculture in Jamaica, including: modernizing the policy, legislative and regulatory framework; developing an effective framework to reduce praedial larceny; improving access to financing for agricultural enterprises and projects; strengthening facilitating institutions including government agencies and production and marketing organizations; improving the capacity and effectiveness of the extension service; modernizing and upgrading the infrastructure for water supply, irrigation, drainage and roads; and providing for satisfactory working conditions and the health and safety of employees in the agricultural sector.

The Sector Plan seeks to enhance the contribution of agriculture to rural development and agricultural sustainability by: promoting economic enterprises and entrepreneurship in rural agricultural communities; establishing a policy and planning framework to protect and develop suitable agricultural lands; building the capacity of community organizations; strengthening compliance with environmental regulations and standards; promoting organic farming; and strengthening risk and hazard mitigation for the sector. Finally, Vision 2030 Jamaica will strengthen national food security by: ensuring consistent and dependable access to adequate food supplies; enhancing affordability and safety of food supplies; promoting appropriate technology and techniques to increase efficiency of staple food production at lower costs and prices; encouraging home food production including backyard gardening; undertaking key food security projects; and promoting the consumption of healthy foods.

4.2.2 Goals and Outcomes

The seven (7) main goals and associated outcomes of the Agriculture Sector Plan are presented below. These goals represent the ultimate desired state of the agriculture sector through which we realize the Sector Vision. The Sector Outcomes represent the desired results which we seek to achieve under each goal. A range of indicators and targets aligned to the Sector Outcomes provide quantitative milestones against which progress in implementing the Agriculture Sector Plan over time may be measured.

Table 11: Agriculture Sector Goals and Outcomes

GOALS	OUTCOMES
1. Efficient Competitive Diversified Value-Added Agricultural Production	1.1 Increased Productivity and Cost Efficiency of Agricultural Enterprises
	1.2 Diversified Range of Agricultural Production including Higher Value-Added Production
	1.3 Strengthened Application of Technology, Innovation, Research and Development to Agricultural Production
	1.4 Development of Key Agricultural Sub-Sectors
2. Strong Marketing Systems for Domestic and Export Markets	2.1 Strong and Effective Marketing Information System
	2.2 Supportive Marketing and Distribution Infrastructure and Network
	2.3 Development of Expanded and New Markets for Jamaican Agricultural Products
3. Competent and Adequate Human Resources	3.1 Provision of Work Force with Skills, Training and Education to Meet the Dynamic Needs of Sector
	3.2 Adequate Long-Term Supply of Labour Force for Sector Development
4. Enabling and Facilitating Framework, Infrastructure and Support Services	4.1 Appropriate Policy, Legislation and Regulations for Long-Term Development of Sector
	4.2 Improved Access to Financing
	4.3 Strengthened Facilitating Institutions
	4.4 Strengthened Extension Services
	4.5 Modernized and Upgraded Infrastructure
	4.6 Satisfactory Working Conditions, Health and Safety of Sector Employees
5. Contributor to Long-Term Rural Development	5.1 Provision of Sustainable Livelihoods for Agricultural Community Residents
	5.2 Comprehensive Land Use Planning and Utilization for Agricultural Development
	5.3 Establishment of a Culture of Holistic Community Development
6. An Environmentally Sustainable Sector	6.1 High Application of Environmental Standards and Good Agricultural Practices (GAPS)
	6.2 Organic Farming as Major Mode of Production
	6.3 Strengthened Risk and Hazard Mitigation for Sector
7. National Food Security	7.1 Increased Access to Adequate and Safe Food Supplies for Population
	7.2 Increased Domestic Food Production
	7.3 Improved Nutritional Status of the Population through Consumption of Healthy Foods

4.2.3 Integration with the National Development Plan

Under Vision 2030 Jamaica, each Sector Plan is integrated with the strategic framework of the National Development Plan. The Agriculture Sector Plan is aligned with the National Development Plan under the following National Goal and National Outcome:

National Goal #3: Jamaica's Economy is Prosperous
National Outcome #12: Internationally Competitive Industry Structures

Consequently the implementation of the Agriculture Sector Plan will contribute primarily to the achievement of National Goal #3 and National Outcome #12 of the National Development Plan.

4.3 Sector Indicators and Targets

The proposed indicators and targets for the Agriculture Sector Plan over the period 2009 -2030 are presented in Table 12 below.

Table 12: Agriculture Sector Plan – Proposed Indicators and Targets

Agriculture Sector Plan					
PROPOSED OUTCOME INDICATORS	BASELINE	PROPOSED TARGETS			COMMENTS
	2007 or Most current	2012	2015	2030	
Agricultural production index (2003=100)	95.9	105.9	112.4	≥150	The FAO projects that global demand for and growth in agriculture products will average 2% annually for the next 30 years. Targets for Jamaica are set using this projection
% change in exports of non-traditional agricultural products (%)		>5%	11%	19%	
Irrigated land as % of total cropland (%)	8.8%				

5. Implementation, Monitoring & Evaluation Framework for the Agriculture Sector

5.1 Implementation Framework

The implementation of the Agriculture Sector Plan is an essential component of the implementation, monitoring and evaluation framework for the Vision 2030 Jamaica – National Development Plan. The Plan is implemented at the sectoral level by ministries, departments and agencies (MDAs) of Government as well as non-state stakeholders including the private sector, NGOs and CBOs. The involvement of stakeholders is fundamental to the successful implementation of the National Development Plan and the Agriculture Sector Plan.

Components of Vision 2030 Jamaica

The Vision 2030 Jamaica - National Development Plan has three (3) components:

1. Integrated National Development Plan:

The integrated National Development Plan presents the overall plan for Vision 2030 Jamaica, integrating all 31 sector plans into a single comprehensive plan for long-term national development. The integrated National Development Plan presents the National Vision, the four National Goals and fifteen National Outcomes, and the National Strategies required to achieve the national goals and outcomes.

2. Medium Term Socio-Economic Policy Framework (MTF):

The Medium Term Socio-Economic Policy Framework (MTF) is a 3-yearly plan which summarizes the national priorities and targets for the country and identifies the key actions to achieve those targets over each 3-year period from FY2009/2010 to FY2029/2030.

3. Thirty-one (31) Sector Plans:

At the sectoral level Vision 2030 Jamaica will be implemented through the strategic frameworks and action plans for each sector as contained in the respective sector plans. Vision 2030 Jamaica includes a total of thirty-one (31) sector plans covering the main economic, social, environmental and governance sectors relevant to national development.

5.1.1 Accountability for Implementation and Coordination

The Cabinet, as the principal body with responsibility for policy and the direction of the Government, has ultimate responsibility for implementation of the National Development Plan. Each ministry and agency will be accountable for implementing the National Development Plan (NDP) through various policies, programmes and interventions that are aligned with the strategies and actions of the NDP and the sector plans. A robust results-based monitoring and evaluation system will be

established to ensure that goals and outcomes of the Plan are achieved. This system will build on existing national and sectoral monitoring and evaluation frameworks and will be highly participatory.

5.1.2 Resource Allocation for Implementation

Vision 2030 Jamaica places great emphasis on ensuring that resource allocation mechanisms are successfully aligned and integrated with the implementation phase of the National Development Plan and sector plans. The requirements to ensure resource allocation for implementation will include alignment of organizational plans in the public sector, private sector and civil society with the National Development Plan, MTF and sector plans; coherence between the various agency plans with the National Budget; rationalization of the prioritization process for public sector expenditure; and increased coordination between corporate planners, project managers and financial officers across ministries and agencies.

5.2 Monitoring and Evaluation Framework

5.2.1 Institutional Arrangements

A number of institutions and agencies, including the following, will be involved in the monitoring and evaluation framework for the National Development Plan and the Agriculture Sector Plan:

1. **Parliament:** The Vision 2030 Jamaica Annual Progress Report will be presented to the Parliament for deliberations and discussion.
2. The **Economic Development Committee (EDC)** is a committee of Cabinet chaired by the Prime Minister. The EDC will review progress and emerging policy implications on the implementation of Vision 2030 Jamaica and the relevant sector plans.
3. The **Vision 2030 Jamaica Technical Monitoring Committee (TMC)**, or Steering Committee, is to be chaired by the Office of the Prime Minister and will provide oversight for the technical coordination and monitoring of the Plan and reporting on the progress of implementation.
4. The **Vision 2030 Jamaica Technical Secretariat** to be institutionalized within the PIOJ will play a leading role in coordinating implementation, analyzing social and economic data and information, consolidating sectoral information into comprehensive reports on Vision 2030 Jamaica's achievements and results, maintaining liaisons with sectoral focal points in MDAs, and supporting the establishment and operation of Thematic Working Groups.

5. **Ministries, Departments and Agencies (MDAs)** represent very important bodies within the implementation, monitoring and evaluation system. They are the Sectoral Focal Points that will provide data/information on a timely basis on the selected sector indicators and action plans, and be responsible for the timely preparation of sector reports that will feed into the Vision 2030 Jamaica Annual Progress Report. For the Agriculture Sector Plan, the main MDAs comprising the relevant Sectoral Focal Point will include the Ministry of Agriculture and Fisheries, and the Rural Agricultural Development Authority.
6. **Thematic Working Groups (TWGs)** are consultative bodies aimed at providing multi-stakeholder participation in improving the coordination, planning, implementation and monitoring of programmes and projects relevant to the NDP and sector plans, including the Agriculture Sector Plan. TWGs will be chaired by Permanent Secretaries or senior Government officials and shall comprise technical representatives of MDAs, National Focal Points, the private sector, Civil Society Organizations and International Development Partners. TWGs will meet a minimum of twice annually.

5.2.2 Indicator Framework and Data Sources

Appropriate indicators are the basic building blocks of monitoring and evaluation systems. A series of results-based monitoring policy matrices will be used to monitor and track progress towards achieving the targets for the NDP and sector plans, including the Agriculture Sector Plan. The performance monitoring and evaluation framework will be heavily dependent on line/sector ministries for quality and timely sectoral data and monitoring progress.

The results-based performance matrices at the national and sector levels comprise:

- At the national level, 60 proposed indicators aligned to the 15 National Outcomes
- At the sector level, a range of proposed indicators aligned to the sector goals and outcomes
- Baseline values for 2007 or the most recent past year
- Targets which outline the proposed values for the national and sector indicators for the years 2012, 2015 and 2030
- Data sources which identify the MDAs or institutions that are primarily responsible for the collection of data to measure and report on national and sector indicators
- Sources of targets
- Links to existing local and international monitoring frameworks such as the MDGs

Some gaps still exist within the performance matrix and a process of review to validate the proposed indicators and targets is being undertaken. This process is

very technical and time consuming and requires significant cooperation and support from stakeholders and partners. The performance monitoring and evaluation framework will be heavily dependent on ministries for quality and timely sectoral data and monitoring progress. The system will benefit from our existing and relatively large and reliable statistical databases within the Statistical Institute of Jamaica (STATIN) and the PIOJ.

5.2.3 Reporting

The timely preparation and submission of progress reports and other monitoring and evaluation outputs form an integral part of the monitoring process.

The main reports/outputs of the performance monitoring system are listed below.

1. **The Vision 2030 Jamaica Annual Progress Report** will be the main output of the performance monitoring and evaluation system.
2. **The annual sectoral reports** compiled by the Sectoral Focal Points for submission to the Vision 2030 Jamaica Technical Monitoring Committee. These will be integrated into the Annual Progress Report.
3. **Other products** of the performance monitoring system include issues/sector briefs and research reports.

5.2.4 Capacity Development

There is recognition that building and strengthening technical and institutional capacity for the effective implementation, monitoring and evaluation of the NDP and the Agriculture Sector Plan is critical for success. This calls for substantial resources, partnership and long-term commitment to training MDA staff. Training needs will have to be identified at all levels of the system; a reorientation of work processes, instruments, procedures and systems development will have to be undertaken; and staffing and institutional arrangements will need to be put in place. Partnership with the Management Institute for National Development (MIND) and other institutions also will be required to provide training to public sector staff and others in critical areas such as results-based project management and analysis, monitoring and evaluation, and data management.

5.3 The Way Forward

The Agriculture Sector Plan represents the basis for implementation of the Vision 2030 Jamaica – National Development Plan in the Agriculture sector. Some key steps in the implementation process for the Agriculture Sector Plan include:

1. Undertake consultations with stakeholders in the sector to present and review the Agriculture Sector Plan for Vision 2030 Jamaica;
2. Engage with key stakeholders including relevant Ministries, Departments and Agencies (MDAs) to finalize sector-level indicators and targets for the Agriculture Sector Plan for 2012, 2015 and 2030;
3. Mainstream the Agriculture Sector Strategic Framework and Action Plan into the Corporate/Business and Operational Plans of the relevant MDAs as the mechanism for implementation in the public sector; and
4. Ensure participation by key Agriculture sector stakeholders in the establishment and ongoing operation of the implementation, monitoring and evaluation framework for Vision 2030 Jamaica, including the Sectoral Focal Point and Thematic Working Group for the Agriculture Sector Plan.

6. Action Plan for the Agriculture Sector

The Action Plan represents the main framework for the implementation of the Agriculture Sector Plan for Vision 2030 Jamaica. The tracking of implementation of the Agriculture Sector Plan will take place through the Action Plan as well as the framework of sector indicators and targets.

The Action Plan contains the elements listed below.

- i. Sector Goals
- ii. Sector Outcomes
- iii. Sector Strategies
- iv. Sector Actions
- v. Responsible Agencies
- vi. Time-Frame

**VISION 2030 JAMAICA
AGRICULTURE SECTOR PLAN
DRAFT STRATEGIC FRAMEWORK AND ACTION PLAN**

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
Goal #1: Efficient Competitive Diversified Value-Added Agricultural Production				
1.1 Increased Productivity and Cost Efficiency of Agricultural Enterprises	1.1.1 Encourage greater use of modern and appropriate equipment, tools and techniques among farmers	1.1.1.1 Develop and implement farm mechanization programme	MOAF, RADA	Years 1-6
		1.1.1.2 Increase small farmers production and productivity by the utilization of appropriate farm machinery, small tools and implements through acceleration of the small farm mechanization programme	MOAF, RADA	Years 1-6
		1.1.1.3 Implement Tractor Programme island-wide	MOAF, RADA	Years 1-6
	1.1.2 Promote increased labour productivity	1.1.2.1 Promote use of performance-based incentive systems to encourage increased productivity among medium and large farmers	Private Sector, JAS, MOAF, RADA	Years 1-6 Ongoing
		1.1.2.2 Promote best practice in worker motivation and labour relations in agricultural enterprises	Private Sector, JAS, MOAF, RADA	Years 1-6 Ongoing
		1.1.2.3 Build technical capabilities and capacities of farmers	MOAF, RADA	Years 1-6 Ongoing

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
	1.1.3 Identify production systems that are appropriate to production zones and size of enterprise	1.1.3.1 Apply comprehensive soil profile for agricultural lands to guide crop selection and care in respective production zones	MOAF, RADA	Years 1-6 Ongoing
		1.1.3.2 Establish system of crop zoning based on suitability of soil types and growing conditions, with regards to optimizing crop yields, production and productivity	MOAF, RADA	Years 1-6
		1.1.3.3 Promote use of dry farming systems that are appropriate to relevant production zones	MOAF, RADA	Years 1-6 Ongoing
	1.1.4 Develop modern, efficient farming systems through research and application of local and international best practices	1.1.4.1 Provide training for agricultural enterprises and farmers in more efficient management systems and record keeping, modern business practices, quality standards, project proposal development, pricing and marketing products	MOAF, RADA, JAS	Years 1-6 Ongoing
		1.1.4.2 Promote the use of protected cultivation for specific crops (including greenhouse technology)	MOAF, RADA, JAS, Private Sector	Years 1-6 Ongoing
		1.1.4.3 Encourage clustering of farm activities to take advantage of shared knowledge, technology on production methods, and marketing of crops or livestock	MOAF, RADA, JAS, Private Sector	Years 1-6 Ongoing
		1.1.4.4 Develop model farms and demonstration plots at strategic points island-wide	MOAF, Private Sector	Years 1-6

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
		1.1.4.5 Strengthen Crop Care Programmes in Pest and Pesticide Surveillance, Technology Transfer, and Training in order to meet needs of local agriculture sector and international trade	MOAF, RADA	Years 1-6
		1.1.4.6 Continue to strengthen Integrated Pest Management (IPM) approaches	MOAF, RADA, JAS, Private Sector	Years 1-6 Ongoing
		1.1.4.7 Encourage collaboration and collective buying of inputs to obtain lower unit cost of supplies and cheaper agricultural inputs	MOAF, RADA, JAS, Private Sector	Years 1-6 Ongoing
		1.1.4.8 Expand Farmers' Registration Programme	RADA	Years 1-6 Ongoing
		1.1.4.9 Recommend and promote Quality Standards/ Guidelines for existing products and establish standards for new products	BSJ	Years 1-6 Ongoing
		1.1.4.10 Develop National Industry Standards Manuals for agricultural sub-sectors, including technical, environmental, health and safety standards	MOAF, RADA, PMOs, JOAM, NEPA	Years 1-6 Ongoing
		1.1.4.11 Strengthen training of farmers in application of Good Agricultural Practices (GAPS)	RADA	Years 1-6 Ongoing
		1.1.4.12 Ensure compliance with standards for local and international markets including labeling, packaging and food safety and the use of acceptable processes such as HACCP	MOAF, BSJ, MIIC, SRC, JIPO, AAAJ, RADA, Packaging Companies	Years 1-6 Ongoing

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
1.2 Diversified Range of Agricultural Production including Higher Value-Added Production		1.1.4.13 Redevelop uniform seed quality standards (including seed health) for locally produced and imported seed	MOAF	Years 1-3
		1.1.4.14 Improve on-farm post-harvest practices	RADA, Processors, SRC, R&D Institutions	Years 1-6 Ongoing
	1.2.1 Utilize value chain approach	1.2.1.1 Analyze the value chain for agriculture including local and international links and identify strengths of Jamaican producers	MOAF, RADA, JAS, Private Sector	Years 1-6 Ongoing
		1.2.1.2 Implement ITC sub-sector strategies for roots & tubers, fruits & vegetables, herbs & spices	MOAF, ITC	Years 1-3
		1.2.1.3 Apply participatory methodology to develop and implement sub-sector strategies for other commodities using the value chain approach	MOAF, ITC	Years 4-9
		1.2.1.4 Undertake Value Chain Analysis of Jamaican dairy and beef cattle industry	MOAF, JLA, FAO	Years 1-3
		1.2.1.5 Identify possible SME clusters by certain criteria such as survey of the area (geographical) and commodities, size etc.	Farmers groups, PMOs, MOAF	Years 1-3
		1.2.1.6 Develop clusters to integrate rural agricultural producers and micro, small and medium enterprises into the production and marketing/trade chains	Farmers groups, PMOs, MOAF	Years 1-6 Ongoing
	1.2.2 Promote cropping models	1.2.2.1 Support development of business plans for farmers based on production levels and	MOAF, RADA	Years 1-6 Ongoing

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
	which increase the number of crops and other enterprises being carried out simultaneously or in efficient sequence	efficient cropping systems		
		1.2.2.2 Prepare Opportunity Profiles for various crops and livestock options	MOAF, RADA	Years 1-6 Ongoing
		1.2.2.3 Prepare farm models for various crops and livestock options	MOAF, RADA	Years 1-6 Ongoing
1.3 Strengthened Application of Technology, Innovation, Research and Development to Agricultural Production	1.3.1 Increase application of information and communication technology (ICT) to agricultural production	1.3.1.1 Implement electronic Extension Activity Reporting System (EARS)	MOAF, RADA	Years 1-3
		1.3.1.2 Develop land use geo-spatial database	MOAF (Rural Physical Planning)	Years 1-6
		1.3.1.3 Expand application of e-government to the agricultural sector, including approval of veterinary import permits	MOAF, OPM	Years 1-6 Ongoing
	1.3.2 Develop and strengthen partnerships between the private sector and research and development institutions	1.3.2.1 Initiate public and private-sector partnerships for funding of adaptive market-driven research	MOAF, SRC, Tertiary Institutions, Private Sector	Years 1-6 Ongoing
	1.3.3 Strengthen	1.3.3.1 Rehabilitate and modernize government agricultural research stations	MOAF	Years 1-9

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
	agricultural research institutions and programmes	1.3.3.2 Establish a Centre of Excellence for advanced technology (CEATA) to drive research and technological dissemination in agriculture	MOAF	Years 1-3
		1.3.3.3 Strengthen capacity of CEATA to coordinate the research agenda and the development of agricultural education	MOAF, CARDI	Years 1-6 Ongoing
		1.3.3.4 Increase the number of internationally accredited laboratories	MOAF (Rural Physical Planning)	Years 1-6 Ongoing
		1.3.3.5 Promote conservation of select root crop, vegetable and fruit tree germplasm	MOAF, CARDI, SRC	Years 1-6
		1.3.3.6 Promote and strengthen conservation, research and export of genetic material including livestock and endemic species	MOAF, CARDI, SRC, Tertiary Institutions, Private Sector	Years 1-6 Ongoing
	1.3.4 Improve the delivery of research results to producers	1.3.4.1 Encourage greater use of demonstration plots and farmer farm field schools including Hounslow Demonstration Centre	MOAF, RADA, CARDI	Years 1-3 Ongoing
		1.3.4.2 Improve dissemination and use of annual report of research papers and findings	MOAF, RADA, CARDI, SRC	Years 1-6 Ongoing
		1.3.4.3 Improve availability of improved planting material including from tissue culture labs and nurseries for seedlings	R&D CARDI Farmers' Associations Agricultural Training Institutions	Years 1-6 Ongoing

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
	1.3.5 Carry out research on new and high- value niche crops which may be added to the mix of crops being cultivated	1.3.5.1 Undertake market-driven research and development on crops and livestock	MOAF, RADA, CARDI, SRC, Tertiary Institutions, Private Sector	Years 1-6 Ongoing
		1.3.5.2 Undertake research in support of development of organic farming and food	MOAF, RADA, CARDI, SRC, JOAM, Tertiary Institutions, Private Sector	Years 1-6 Ongoing
		1.3.5.3 Continue introduction of new technologies from other countries that have similar conditions as Jamaica	MOAF, RADA, CARDI, SRC	Years 1-6 Ongoing
		1.3.5.4 Implement integrated spice industry development programme	MOAF, RADA, Export Division, Private Sector	Years 1-6
	1.3.6 Develop a comprehensive agricultural information system	1.3.6.1 Promote the Agricultural Business Information System (ABIS) as the premiere agricultural information system covering production, marketing and extension	MOAF, RADA	Years 1-3 Ongoing
		1.3.6.2 Expand use of agribusiness information systems	MOAF, RADA, JAS, PMOs, Private Sector	Years 1-3 Ongoing
		1.3.6.3 Undertake integration of production and market information into ABIS to facilitate improved decision making	MOAF, RADA	Years 1-3 Ongoing

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
		1.3.6.4 Develop current registry of farmers and integrate into ABIS database	MOAF, RADA	Years 1-3 Ongoing
		1.3.6.5 Apply GIS and GPS systems to the Agricultural Business Information System (ABIS)	MOAF, RADA, OPM	Years 1-6 Ongoing
1.4 Development of Key Agricultural Sub-Sectors	1.4.1 Develop and implement strategic plans and programmes for key agricultural sub-sectors	1.4.1.1 Implement European Union Banana Support Programme	MOAF	Years 1-6
		1.4.1.2 Implement the Country Adaptation Strategy for the Sugar Industry	MOAF, AICFA	Years 1-6
		1.4.1.3 Implement Dairy Sector Revitalization Programme	MOAF, JLA	Years 1-6
		1.4.1.4 Implement Production and Productivity Programme for strategic crops	MOAF, PMOs, RADA	Years 1-6
		1.4.1.5 Develop a sustainable fruit tree crop industry by establishment of commercial orchards and agro processing	MOAF, PMOs, RADA	Years 1-12
		1.4.1.6 Implement the Improving Jamaica's Agricultural Productivity (IJAP) project to develop the greenhouse industry along the supply chain from production through post-harvest, value-added and marketing	MOAF, PMOs, RADA	Years 1-6
		1.4.1.7 Promote conservation of and sustainable utilization of Jamaica's cattle breeds	MOAF, JLA, RADA	Years 1-6
		1.4.1.8 Develop a sustainable beekeeping sub-sector	MOAF, All-Island Bee Farmers	Years 1-6

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
			Association	
		1.4.1.9 Develop appropriate small ruminant and pig breeding and production systems and dissemination of improved genetic stock	MOAF, PMOs, RADA	Years 1-6
	1.4.2 Develop and implement strategic plans and programmes for fisheries	1.4.2.1 Implement Fisheries Development Programme	MOAF	Years 1-6
		1.4.2.2 Implement Fishing Beach Infrastructure Development Programme	MOAF	Years 1-6
		1.4.2.3 Expand Fishers' Registration Programme	MOAF	Years 1-3 Ongoing
		1.4.2.4 Develop and implement Fishery Management Plans for Fisheries Management Areas covering all capture fisheries	MOAF	Years 1-3 Ongoing
		1.4.2.5 Strengthen the National Fisheries Advisory Council	MOAF	Years 1-3 Ongoing
		1.4.2.6 Establish a communication system for fishers at sea	MOAF, OPM	Years 1-3
		1.4.2.7 Develop and apply GPS system for fishing vessels	MOAF, NLA, OPM	Years 1-3
		1.4.2.8 Establish a research station at Pedro Cays, as well as sanitary conveniences for fisheries on the north east and middle Cays	MOAF	Years 1-3
		1.4.2.9 Rehabilitate infrastructure on fishing beaches	MOAF	Years 1-3

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
		1.4.2.10 Implement National Export Strategy Action Plan for aquaculture	MOAF, JTI, PMO/Aquaculture Cluster, BSJ	Years 1-6
		1.4.2.11 Strengthen and support aquaculture industry	MOAF, PMOs, RADA	Years 1-3 Ongoing
	1.4.3 Develop and implement strategic plans and programmes for forestry	1.4.3.1 Implement new Strategic Forest Management Plan 2009-2013	Forestry Department/Agency	Years 1-6
		1.4.3.2 Build the Forestry Department as an efficient and effective service delivery organization	Forestry Department/Agency, MOAF	Years 1-6
		1.4.3.3 Increase participation of the private sector and non-government organizations in conservation of forest areas and the realization of economic benefits from forest products	Forestry Department/Agency, MOAF, RADA, Private Sector, NGOs, ENGOS	Years 1-6 Ongoing
		1.4.3.4 Increase community participation in and public awareness of and support for forest conservation	Forestry Department/Agency, MOAF, RADA, CBOs	Years 1-6 Ongoing
		1.4.3.5 Develop and implement forest management plans including the conservation of natural forests and the development of forest plantations	Forestry Department/Agency, MOAF, RADA, Private Sector, NGOs, ENGOS, CBOs	Years 1-6

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
		1.4.3.6 Maintain and restore forest cover to protect watersheds and conserve biodiversity	Forestry Department/Agency	Years 1-6 Ongoing
		1.4.3.7 Promote private sector investment in reforestation	Forestry Department/Agency, MOAF, RADA, SDC, JSIF	Years 1-6 Ongoing
Goal #2: Strong Marketing Systems for Domestic and Export Markets				
2.1 Strong and Effective Marketing Information System	2.1.1 Establish comprehensive marketing database that is accessible, user friendly and constantly updated	2.1.1.1 Compile and update local secondary data of market prices, production costs, input prices, market demand for specific commodities, etc. in accessible format for marketing and planning information	MOAF, RADA, STATIN, JAS, JEA	Years 1-3 Ongoing
		2.1.1.2 Develop and implement the Jamaica Agricultural Marketing Information System (JAMIS) to automate and integrate the collection, storage and dissemination of marketing information	MOAF, RADA	Years 1-3
		2.1.1.3 Generate local primary data for marketing information as needed	MOAF, RADA	Years 1-3 Ongoing
		2.1.1.4 Establish comprehensive database using internet sources, trade journals, foreign public and private databases to include global commodity prices, market demand information by diaspora, regional and	MOAF, RADA, STATIN	Years 1-6

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
		international markets		
		2.1.1.5 Undertake market research for the tourism and agro-processing sectors	MOAF, MIIC, JAPA, JTB, TPDCo, SRC, Universities	Years 1-6 Ongoing
		2.1.1.6 Undertake market research into local and ethnic markets abroad	MOAF, RADA, STATIN, JEA, JTI	Years 1-3 Ongoing
		2.1.1.7 Carry out surveys and studies to determine market trends, consumption patterns and tastes and consumer preferences for a range of local and export market segments	MOAF, RADA, STATIN, JEA, JTI	Years 1-3 Ongoing
		2.1.1.8 Use research findings to inform modifications in agricultural varieties and packaging	MOAF, RADA, SRC, JEA, JTI	Years 1-6 Ongoing
		2.1.1.9 Build capacity of MOAF and RADA staff to undertake market research, marketing information gathering and planning, market development and promotion	MOAF, RADA, Universities, Trade Associations, CASE, MOE, HEART/NTA	Years 1-6 Ongoing
		2.1.1.10 Improve Aquaculture Data Collection System	MOAF	Years 1-3
	2.1.2 Establish effective dissemination of information on marketing	2.1.2.1 Disseminate information through publication of comprehensive marketing database through mailing list, e-mail list, MOAF website, marketing organizations, marketing journals and newspapers	MOAF, RADA	Years 1-6 Ongoing

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
	database, including stakeholder, institution and association and success stories	2.1.2.2 Broaden and streamline use of various media and modalities for regular dissemination of information on farm gate, wholesale, retail, supermarket and municipal and parish market prices	MOAF, RADA	Years 1-3 Ongoing
		2.1.2.3 Institute information hotline access for data users to access market information on constant basis	MOAF, Communication providers	Years 1-3
		2.1.2.4 Explore options for setting up a network to provide distributed information via SMS and browser (existing cell phone operators or wi-fi distributors or autonomous cell phone operators)	JBOS /ABIS MOAF	Years 1-3
		2.1.2.5 Publicize success stories and market opportunities through various media	Marketing Division, MOAF, RADA, JAS, Media Houses, JIS	Years 1-6 Ongoing
		2.1.2.6 Strengthen numbers and capacity of Marketing Officers	MOAF	Years 1-6 Ongoing
	2.1.3 Establish linkages with other local and international databases	2.1.3.1 Develop stronger linkages with local and international organizations that provide market information	MOAF, JEA, JTI, STATIN	Years 1-6 Ongoing

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
2.2 Supportive Marketing and Distribution Infrastructure and Network	2.2.1 Develop reliable marketing distribution and communications network and infrastructure	2.2.1.1 Expand and strengthen production and marketing organizations (PMOs) to supply centralized post-harvesting and distribution facilities	MOAF, RADA, JAS, JHTA, MTW, Parish Councils, JEA, Retailers' Association, MIIC, JAPA, Wholesalers, Supermarkets	Years 1-6 Ongoing
		2.2.1.2 Undertake repair and upgrading of existing market infrastructure in major distribution centres including provision of modernized communication systems	MOAF, RADA, OPM, MFPS, JAS, KSAC, Parish Councils	Years 1-3 Ongoing
		2.2.1.3 Strengthen communications network among agencies, organizations and associations involved in agricultural marketing	MOAF, RADA, JAS, KSAC, Parish Councils, JEA, MIIC, JAPA, Wholesalers, Supermarkets, Communications Companies	Years 1-3 Ongoing
		2.2.1.4 Establish wholesale market facilities for handling and selling produce and livestock, with cold storage, water, shelter, toilets, scales and display areas for commercial activities	MOAF, RADA, OPM, MFPS, JAS, KSAC, Parish Councils	Years 1-6
	2.2.2 Develop stakeholder	2.2.2.1 Organize consultations among agencies, organizations and associations and other	MOAF, RADA, JEA, AAAJ, JHTA,	Years 1-3 Ongoing

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
	networks	stakeholders involved in agricultural marketing to air views and share information	Wholesalers, Consumer groups	
		2.2.2.2 Produce newsletter and organize mailing list to provide information to key stakeholder contacts on a regular basis	MOAF, RADA, JEA, JAPA, JHTA, Wholesalers, Consumer groups, Media, JIS	Years 1-3 Ongoing
	2.2.3 Strengthen capacity of current practitioners in the informal distribution system	2.2.3.1 Facilitate upgrading of level of equipment and vehicles for higgler, truckers and purveyors	DBJ, Credit Institutions, JAS	Years 1-6 Ongoing
		2.2.3.2 Provide special training in sorting, grading, packaging, presentation technologies and transporting of produce	MOAF, MIIC, RADA, JAS	Years 1-6 Ongoing
		2.2.3.3 Encourage adoption of best practices and innovations by higgler, truckers, purveyors and marketers including through media recognition of top achievers	MOAF, JCC, JMA, JEA, JTI, JHTA, MIIC, RADA, JAS, Jamaica 4H, Parish Councils, KSAC, Communications Companies, JIS, Media Houses	Years 1-3 Ongoing
	2.2.4 Strengthen post harvest facilitating	2.2.4.1 Establish public private sector partnerships in the establishment and operation of post-harvest facilities with packing houses for	MOAF, MFPS, MIIC, Refrigeration Companies, JAS,	Years 1-3 Ongoing

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
	infrastructure	collection, grading, sorting, cold and ambient temperature storage, and distribution of produce	RADA, JEA, JAPA	
		2.2.4.2 Upgrade cold storage and export complexes	MOAF, MFPS, MIIC, Refrigeration Companies, JAS, RADA, JEA, JAPA	Years 1-3 Ongoing
		2.2.4.3 Establish ripening houses for bananas and plantain	MOAF, RADA, EUBSP	Years 1-3 Ongoing
2.3 Development of Expanded and New Markets for Jamaican Agricultural Products	2.3.1 Strengthen linkages with other economic sectors including manufacturing and tourism	2.3.1.1 Strengthen linkages between agriculture and other sectors, to increase the use of locally produced agricultural commodities and create new opportunities, markets and arrangements	MOAF, RADA, JAS, Jamaica 4H, JMA, JEA, JTI, JHTA, MOT, MIIC	Years 1-6 Ongoing
		2.3.1.2 Strengthen communications with key linkage sectors including through newsletters, publications and regular fora and meetings	MOAF, RADA, JAS, Jamaica 4H, Parish Councils, JMA, JEA, JTI, AAAJ, JHTA, Min. of Tourism, MIIC, JIS, Media Houses	Years 1-3 Ongoing
		2.3.1.3 Increase collaboration with the distributive trade in marketing of locally produced agricultural commodities	MOAF, RADA, JAS, MIIC, JCC	Years 1-3 Ongoing

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
		2.3.1.4 Promote community-based Agro Tourism	MOAF IICA, SDC, JSIF, TPDCo	Years 1-3
		2.3.1.5 Strengthen role and capacity of Agri- Business Co-ordination Unit to strengthen linkages between farmers and end users of agricultural produce	MOAF	Years 1-6
		2.3.1.6 Develop an industry purchasing planning platform to facilitate arranged purchasing between buyers and growers and enhance coordination of planting and reaping schedules with buyer requirements	MOAF, RADA, JMA, JEA, JAS, JAPA, JTI	Years 1-3 Ongoing
	2.3.2 Undertake local and global promotion of Jamaican agricultural products	2.3.2.1 Increase promotion of local agricultural products through participation in international trade shows, advertising in foreign magazines, and on foreign websites	MOAF, Media and advertising companies, JEA, JTI, RADA, JAS, CFNI, MOHE, JAPA, JHTA	Years 1-6 Ongoing
		2.3.2.2 Coordinate promotion of local agricultural products with major tourism promotions being carried out in the tourism industry for international and regional markets	MOAF, MOT, JTB, TPDCo, JEA, AAAJ, RADA, JAS, JTI, JHTA, MIIC	Years 1-6 Ongoing
		2.3.2.3 Identify and assess value-added markets for agricultural products for local agro-processors, agro-tourism, nutraceuticals and export markets	MOAF, JAPA, Ministry of Tourism, SRC, Universities, CASE	Years 1-6 Ongoing

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
		2.3.2.4 Implement the “Eat What We Grow, Grow What We Eat” Campaign	MOAF, RADA, JIS, Private Sector	Years 1-3
		2.3.2.5 Implement the Banana Consumption Campaign	MOAF, RADA, JIS, EUBSP, Private Sector	Years 1-6
		2.3.2.6 Mount an awareness initiative to recruit and provide training to brokers traders, stock inspectors, receipt issuers, shipping agents	JBOS /ABIS MOAF, MFPS, MIIC, JEA, Customs	Years 1-3 Ongoing
		2.3.2.7 Strengthen collaboration among agencies to promote local agricultural products in export markets	MOAF, RADA, JOAM, JTI, JTB, MFAFT, Jamaican Embassies, JEA, JAS	Years 1-6 Ongoing
	2.3.3 Analyze local and international markets on an ongoing basis, including new, emerging and alternative markets	2.3.3.1 Build capacity of Marketing Division to review current international markets, and identify new markets for traditional and non-traditional Jamaican agricultural commodities, such as fair trade, organic agriculture, diaspora, Caribbean and emerging country markets	MOAF, RADA, JOAM, JTI, MFAFT, Jamaican Embassies, JEA, JAS	Years 1-6
	2.3.4 Develop new and emerging markets	2.3.4.1 Develop agricultural products based on new production and processing methods for promotion in local and export markets	MOAF, RADA, JOAM, JTI, JAS, MFAFT, JEA, Jamaican Embassies	Years 1-3 Ongoing

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
		2.3.4.2 Liaise with end users to identify and develop new market segments for local agricultural products	MOAF, RADA, Private Sector, SRC	Years 1-6 Ongoing
		2.3.4.3 Encourage import substitution for agricultural products with potential for local production on competitive basis	MOAF, RADA, Private Sector, SRC	Years 1-6 Ongoing
		2.3.4.4 Support research in pursuit of “fair trade” crops	MOAF, RADA, SRC, MFAFT, EUBSP	Years 1-6 Ongoing
		2.3.4.5 Implement sub-sector marketing strategies for roots & tubers, fruits & vegetables, herbs & spices	MOAF	Years 1-6
	2.3.5 Develop favourable external trade relations for marketing of Jamaican agricultural products	2.3.5.1 Develop market opportunities for Jamaican agricultural products to EU markets under the EU/CARIFORUM Economic Partnership Agreement (EPA)	MOAF, MFAFT, RADA, JEA, JTI, MIIC, MFPS, JAS, Private Sector	Years 1-3 Ongoing
		2.3.5.2 Develop market opportunities for Jamaican agricultural products to regional markets under the CSME	MOAF, MFAFT, RADA, JEA, JTI, MIIC, MFPS, JAS, Private Sector	Years 1-3 Ongoing
		2.3.5.3 Ensure that the access of Jamaican agricultural products to domestic, regional and international markets are adequately defended in trade negotiations and agreements	MOAF, MFAFT, JTAT, Private Sector	Years 1-3 Ongoing

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
	2.3.6 Strengthen intellectual property rights of nation brand for agricultural products	2.3.6.1 Expand use of copyright, trademarks, certification marks, logos, and geographical indications for Jamaican agricultural products	MOAF, MFAFT, JIPO, Commodity associations and boards, JAS, RADA, BSJ, JTI, JEA	Years 1-6 Ongoing
		2.3.6.2 Develop an integrated branding strategy for Jamaican agricultural products based on superior quality and the exotic image of Jamaica as a brand	MOAF, JTI, JEA, MFAFT, Jamaican Embassies, JIPO, Attorney General, Commodity associations and boards, JAS, RADA, BSJ	Years 1-6
		2.3.6.3 Develop and implement “Jamaica made” trade mark for agro processors	MOAF, JTI, BSJ, JIPO, JAPA	Years 1-3
Goal #3: Competent and Adequate Human Resources				
3.1 Provision of Work Force with Skills, Training and Education to Meet the Dynamic Needs of Sector	3.1.1 Broaden range and access for agricultural education and training at all levels	3.1.1.1 Facilitate student financing for courses in agricultural extension and research	MOAF, Universities and training colleges, SLB, Credit institutions	Years 1-6 Ongoing
		3.1.1.2 Design short courses and training modules appropriate for farmers, farm supervisors and workers	RADA, Universities and training colleges, HEART/NTA	Years 1-6 Ongoing
		3.1.1.3 Introduce post-graduate degree programmes in agribusiness and other agricultural-related	MOAF, Universities and training colleges,	Years 1-6 Ongoing

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
		disciplines	UCJ	
		3.1.1.4 Expand the range of locally-based tertiary institutions offering agricultural degree programmes	MOAF, Universities and training colleges, UCJ	Years 1-6 Ongoing
	3.1.2 Strengthen capacity of existing agricultural educational and training institutions	3.1.2.1 Transfer responsibility of administration of agricultural high schools from the MOE to the MOAF	MOAF, MOE	Years 1-3
		3.1.2.2 Improve curricula of agricultural high schools	MOAF, MOE	Years 1-6 Ongoing
		3.1.2.3 Strengthen programmes offered by Ebony Park for training of agricultural workers and technicians	HEART/NTA, MOAF	Years 1-3
		3.1.2.4 Develop and strengthen programmes which lead to certification for agricultural occupations, professionals and operatives	MOAF, UWI, CASE, UTECH, 4H, HEART/NTA	Years 1-6 Ongoing
	3.1.3 Promote infusion of agriculture in primary and secondary education	3.1.3.1 Expand National School Garden Programme in public schools island-wide	4H, MOAF, MOE	Years 1-3 Ongoing
		3.1.3.2 Liaise with the MOE for the inclusion of Agricultural Science in school curricula	MOAF, MOE	Years 1-6 Ongoing
	3.2 Adequate Long-Term Supply of Labour Force for Sector Development	3.2.1.1 Develop and implement programmes to facilitate access to government-owned land to young farmers on lease basis	MOAF, OPM, NLA, MCYS, 4H	Years 1-3 Ongoing
		3.2.1.2 Facilitate access to agricultural inputs to young farmers	MOAF, OPM, NLA, MCYS, 4H, Credit	Years 1-3 Ongoing

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
			Institutions	
		3.2.1.3 Encourage involvement and participation of youth in agricultural organizations (e.g. 4H Clubs)	MOAF, OPM, MCYS, 4H, HEART/NTA	Years 1-3 Ongoing
		3.2.1.4 Implement reward system for youth involved in mentoring programmes	MOAF, OPM, MCYS, 4H, HEART/NTA	Years 1-3 Ongoing
		3.2.1.5 Expand Youth in Agriculture Programme	4H, MOAF	Years 1-3 Ongoing
		3.2.1.6 Expand Apprenticeship Programme in selected sub-sectors	4H, MOAF	Years 1-3 Ongoing
	3.2.2 Strengthen long-term planning for agricultural labour force	3.2.2.1 Carry out regular workforce audits to determine gaps in skills set within the agricultural sector	MOAF, MLSS, Private Sector	Years 1-6 Ongoing
		3.2.2.2 Conduct audits of agricultural educational and training institutions to match programmes with long-term human resource needs of sector	MOAF, MLSS, Universities and Agricultural training institutions, Private Sector	Years 1-6 Ongoing
		3.2.2.3 Develop an Agricultural Skills Bank to quantify the level and types of skills present in the public and private sector and to determine the need for training and acquisition of scarce skills	MOAF, MLSS, Universities and Agricultural training institutions, Private Sector	Years 1-6 Ongoing

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
		3.2.2.4 Provide timely labour market demand and supply information to inform decision making for all stakeholders within the agricultural sector	MOAF, MLSS, Universities and Agricultural training institutions, Private Sector	Years 1-6 Ongoing
Goal #4: Enabling and Facilitating Framework, Infrastructure and Support Services				
4.1 Appropriate Policy, Legislation and Regulations for Long-Term Development of Sector	4.1.1 Develop and maintain appropriate modernized policy, legislation and regulatory framework for the agricultural sector	4.1.1.1 Finalize and promulgate new policies for the agricultural sector, including: <ul style="list-style-type: none"> • Draft Plant Health Policy • Draft Animal Health Policy • National Fisheries Policy • Banana Industry Policy • National Food Safety Policy • Organic Policy • Seed Policy • Marketing Policy • Weather Risk Management Policy 	MOAF, CO	Years 1-6
		4.1.1.2 Integrate environmental sustainability issues in sector policies	MOAF, NEPA, OPM, CO	Years 1-3 Ongoing
		4.1.1.3 Integrate gender equity issues in sector policies	MOAF, MYCS, MLSS, OPM, CO	Years 1-3 Ongoing
		4.1.1.4 Provide the regulatory framework and enforcement mechanisms relevant to the	MOAF, Department of Plant Quarantine,	Years 1-3

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
		production, importation and exportation of seed/planting material	R&D and Training Institutions, Input Industries, Farmers' Associations	
		4.1.1.5 Repeal ACB Act and transfer function of ACB to Registrar of Cooperatives	MOAF	Years 1-3
		4.1.1.6 Enact New Fisheries Act	MOAF	Years 1-3
		4.1.1.7 Undertake review, updating and harmonization of legislation relevant to agriculture sector	MOAF	Years 1-3 Ongoing
		4.1.1.8 Ensure effective participation in international trade negotiations on agriculture, including the WTO Doha Development Round	MFAFT, MOAF	Years 1-3 Ongoing
		4.1.1.9 Strengthen regional and hemispheric interaction among and between agricultural ministries and international organizations	MOAF, MFAFT	Years 1-3 Ongoing
		4.1.1.10 Coordinate sector development with the hemispheric AGRO 2003-2015 Plan ¹¹	MOAF, MFAFT	Years 1-6
		4.1.1.11 Conclude bilateral fishing agreements to protect fishery resources within Jamaica's Exclusive Economic Zone (EEZ)	MFAFT, MOAF	Years 1-6
		4.1.1.12 Develop policies to ensure increased social inclusion in agriculture sector	MOAF, MYCS, MLSS, OPM, CO	Years 1-6 Ongoing

¹¹ The AGRO 2003-2015 Plan is the shared long-term agenda for promoting the sustainable development of agriculture and the rural milieu in the Americas which was adopted at the Second Hemispheric Ministerial Meeting (Panama 2003).

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
	4.1.2 Develop effective framework to reduce praedial larceny	4.1.1.13 Conduct public consultations as a means of broadening participation and engendering inclusiveness in policy development	MOAF	Years 1-6 Ongoing
		4.1.2.1 Strengthen National Advisory Committee on Praedial Larceny and implement recommendations over time	MOAF, JAS, MNS, Farmers Associations, PMOs, JCF, ISCF, Coast Guard, MOJ, MOHE	Years 1-3 Ongoing
		4.1.2.2 Develop and implement Praedial Larceny Action Plan	MOAF, JAS, MNS, Farmers Associations, PMOs, JCF, ISCF, Coast Guard, MOJ, MOHE	Years 1-6
		4.1.2.3 Review and modernize existing legislation and develop new legislation and regulations relevant to praedial larceny	MOAF, MNS, OPM, CO	Years 1-3 Ongoing
		4.1.2.4 Establish and expand National Animal Identification System to undertake traceability of meats island-wide	MOAF	Years 1-3
4.2 Improved Access to Financing	4.2.1 Encourage diversification of financial support for agricultural projects	4.2.1.1 Formulate and implement innovative modalities for credit for small farmers	MOAF, DBJ, MFPS, PMOs, Private Financial Institutions	Years 1-3 Ongoing
		4.2.1.2 Arrange financing for agricultural projects and large scale agricultural programmes	MOAF, DBJ, MFPS, Agro-Invest	Years 1-3 Ongoing

OUTCOMES	STRATEGIES	ACTIONS	RESPONSIBLE AGENCIES AND STAKEHOLDERS	TIME-FRAME
	including venture capital and equity financing		Corporation, PC Banks, Ex-Im Bank, Private Financial Institutions	
		4.2.1.3 Promote collaboration between DBJ and PC Banks as well as Credit Unions in the provision of low cost financing for farmers	MOAF, DBJ, MFPS, Private Financial Institutions	Years 1-3 Ongoing
		4.2.1.4 Promote micro-financing through Production and Marketing Organizations	MOAF, DBJ, MFPS, PMOs, Private Financial Institutions	Years 1-3 Ongoing
		4.2.1.5 Expand role of Production and Marketing Organizations in loan provision and management, e.g. cattle industry	MOAF, PMOs, DBJ, Dairy Board, Private Financial Institutions, MFPS	Years 1-3 Ongoing
		4.2.1.6 Review and restructure the PC banks	MOAF, MFPS	Years 1-6
		4.2.1.7 Increase access for loans and grant funding to farmers for upgrading of farms inclusive of small-scale irrigation systems	MOAF, DBJ, MFPS, Agro-Invest Corp., PC Banks, Ex-Im Bank, Private Financial Institutions	Years 1-3 Ongoing
		4.2.1.8 Explore the feasibility of a venture capital fund including potential support from the diaspora for investment in local value added development products	MOAF, MFPS, DBJ, MFAFT	Years 1-6